

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q83107

Nicolas DREVON

Appln. No.: 10/509,852

Group Art Unit: 2617

Confirmation No.: 4310

Examiner: Eric J. ELCENKO

Filed: September 30, 2004

For: METHOD FOR CONTROLLING ACCESS RIGHTS IN A CELLULAR MOBILE  
RADIO COMMUNICATION SYSTEM

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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**I. REAL PARTY IN INTEREST**

Based on information supplied by the Appellant and to the best knowledge of the Appellant's legal representatives, the real party in interest is the assignee, EVOLIUM S.A.S., by virtue of an Assignment recorded on September 30, 2004, at Reel 016693, Frame 0079.

**II. RELATED APPEALS AND INTERFERENCES**

To the best of their knowledge, there are no other related appeals or interferences known to Appellant, Appellant's legal representatives or the assignee that will directly affect or be directly affected by or have a bearing on the Board's decision in the instant Appeal.

### **III. STATUS OF CLAIMS**

Claims 1-16 are all the claims pending in the present application. Claims 1-16 have been finally rejected, and are the subject of this appeal. The pending claims are set forth in the Appendix.

**IV. STATUS OF AMENDMENTS**

No amendments have been filed subsequent to the Final Office Action dated June 4,  
2008.

**V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

Independent claim 1 is directed to a method for controlling access rights in a cellular mobile radio system, the method including transferring roaming agreement information from a core network to a radio access network of the cellular mobile radio system, wherein the roaming agreement information is transferred independently of messages linked to calls or user equipments. *See e.g.*, specification, paragraph bridging pages 10 and 11, first full paragraph on page 15 and FIG. 3.

Independent claim 11 is directed to a radio access network equipment of a cellular mobile radio system, the radio access network equipment including means for receiving roaming agreement information from a core network equipment, wherein the roaming agreement information is received independently of messages linked to calls or user equipments. *See e.g.*, specification, first full paragraph on page 15, first full paragraph on page 18 and FIG. 3, element RNC13.

Independent claim 13 is directed to a core network equipment of a cellular mobile radio system, the core network equipment including means for transferring roaming agreement information to a radio access network equipment, wherein the roaming agreement information is transferred independently of messages linked to calls or user equipments. *See e.g.*, specification, first full paragraph on page 15, first full paragraph on page 18 and e.g., FIG. 3, element VLR12.

Independent claim 16 is directed to a mobile radio system including a plurality of mobile terminals; a core network which contains roaming agreement information; and a radio access network which communicates with the mobile terminals and the core network and manages mobility of the mobile terminals within the radio access network wherein the roaming agreement

information is transferred independently of messages linked to calls or user equipments. *See e.g.*, specification, page 14, line 13 through page 15, line 9, first full paragraph on page 18, and FIG. 3.

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1-16 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Hogan et al. (U.S. Patent Application Publication No. 2002/0111180).



## **VII. ARGUMENT**

- A. Hogan does not anticipate claims 1-16 under 35 U.S.C. § 102(b). Specifically, Hogan does not disclose or suggest at least, “transferring roaming agreement information from a core network to a radio access network,” as recited in claim 1.**

Hogan is directed to telecommunications, and particularly to the structure and operation of shared telecommunication networks. To facilitate determination of access rights in a shared network context, the telecommunications network of Hogan transmits, in a broadcast channel over an air interface, an access group eligibility message (300-2) to a user equipment unit (30). The access group eligibility message enables the user equipment unit to ascertain, on a basis of access group to which the user equipment unit belongs, whether the user equipment unit is eligible to operate in a cell for which the access group eligibility message is transmitted.

Claim 1 recites:

1. A method for controlling access rights in a cellular mobile radio system, comprising transferring roaming agreement information from a core network to a radio access network of said cellular mobile radio system, wherein said roaming agreement information is transferred independently of messages linked to calls or user equipment.

Appellant submits that Hogan fails to teach or suggest the claimed feature “transferring roaming agreement information from a core network to a radio access network.” In particular, Appellant notes that Hogan discloses that the core network and the radio access network communicate via the Iu interface in the control plane.<sup>1</sup> The Iu interface is specified in the Technical Specification (TS) 25.413 issued by 3GPP.<sup>2</sup> Technical Specification 25.413 specifies

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<sup>1</sup> See Hogan, paragraphs [12] and [13].

<sup>2</sup> Appellant submitted this reference in an Information Disclosure Statement on March 4, 2008.

a number of features in the control plane. However, at the time of filing of the present application (i.e., up to version V4.4.0), TS 25.413 did not disclose or suggest the claimed features “transferring roaming agreement information from a core network to a radio access network.” Further, TS 25.413 also fails to disclose or suggest “said roaming agreement is transferred independently of messages linked to calls or user equipments,” as claimed. Thus, Appellant submits that Hogan fails to teach or suggest these required features of the claimed invention.

In response, in the Office Action dated December 4, 2008, the Examiner alleges that the arguments above fail to comply with 37 C.F.R. § 1.111(b) because they allegedly amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them over the reference. Further, the Examiner reasserts the previous grounds of rejection in the December 4, 2008 Office Action.

Below, Appellant respectfully disagrees with the Examiner’s allegation, and traverses the rejection by reasserting the previous point, and citing specific portions of the MPEP to support Appellant’s position. Appellant also submits below additional technical arguments.

With respect to claim 1, first, Appellant submits that the cited portions of Hogan make no mention of roaming agreement information; in fact roaming information is not even discussed in Hogan until later on in the application. The only time roaming is mentioned in Hogan is in regards to subscriber groups, or roaming restrictions, both of which are addressed below. The grounds of rejection allege that Hogan’s Iu interface in the control plane, which the core network and radio access network use to communicate, anticipates the transferring of roaming agreement information as claimed. Appellant submits that this is incorrect.

The MPEP states, “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”<sup>3</sup> Hogan makes no explicit disclosure of transferring roaming information as claimed, therefore, for the rejection to stand, it must be inherent in Hogan that the Iu interface in the control plane transfers roaming agreement information, as claimed. Hogan fails in this regard as well. At the time of the filing of the present application, it would not have been inherent that a disclosure of an Iu interface in the control plane discloses the transfer of roaming agreement information, as claimed.

The Technical Specification 25.413<sup>4</sup> specifies a number of features in the control plane, but nowhere does it disclose or suggest the features, “transferring roaming agreement information from a core network to a radio access network.” As the MPEP states, “For a finding of inherency it must be shown that “the allegedly inherent teaching necessarily flows from the teachings of the applied prior art.”<sup>5</sup> It does not necessarily follow that an Iu interface in the control plane would transfer roaming agreement information, as claimed. Therefore, it does not necessarily flow from a disclosure of an Iu interface in the control plane that there is a transfer of roaming agreement information, as claimed. For *at least* this reason, Appellant submits that Hogan fails to anticipate the present application, and Appellant respectfully requests that the rejection be withdrawn.

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<sup>3</sup> MPEP §2131 (emphasis added).

<sup>4</sup> See Information Disclosure Statement and a Statement Under 37 C.F.R. § 1.97(e) filed on March 4, 2008.

<sup>5</sup> MPEP § 2112 (IV) (internal quotation marks omitted)(emphasis in original).

In addition to, and independent from the above argument, Appellant submits that Hogan fails to disclose or suggest the second recitation of claim 1, that roaming agreement information is transferred independently of messages linked to calls or user equipment. The grounds of rejection cite a portion of Hogan which describes four methods of handling access rights for third generation WCDMA networks.<sup>6</sup> These four methods are: (1) equivalent PLMNS; (2) forbidden access areas; (3) subscriber groups; and (4) roaming restrictions. The descriptions of these methods not only fail to disclose or suggest that the required roaming agreement information is transferred independently of messages linked to calls or user equipment, some actually disclose the exact opposite. Hogan discloses that an equivalent PLMNS method “*essentially involves a user equipment unit.*”<sup>7</sup> A forbidden access areas method, “*requires that a ... user equipment unit (UE) perform a location update ...*”<sup>8</sup> A subscriber group method involves, “*sending the list of allowed neighbor cells to the user equipment unit ...*”<sup>2</sup> Clearly, none of these methods of handling access rights discloses or suggests roaming agreement information transferred independently of messages linked to calls or user equipment.

Finally, the cited portions of Hogan mention nothing about roaming restriction groups, except that they exist. Nowhere does Hogan explicitly, or inherently describe a roaming restriction group method of handling access rights where roaming agreement information is transferred independently of messages linked to calls or user equipment. For *at least* these

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<sup>6</sup> See Hogan, Background, Paragraphs 15-19.

<sup>7</sup> Id. at Paragraph 16 (emphasis added).

<sup>8</sup> Id. at Paragraph 32 (emphasis added).

<sup>2</sup> Id. at Paragraph 20 (emphasis added).

reasons, Appellant submits that Hogan fails to disclose or suggest that roaming agreement information is transferred independently of messages linked to calls or user equipment, as claimed. Therefore, Appellant maintains that the rejection should be withdrawn.

Additionally, Appellant submits that independent claims 11, 13 and 16 are patentable at least based on reasons similar to those set forth above with respect to claim 1. Appellant submits that claims 2-10, 12, and 14-15 are patentable at least by virtue of their respective dependencies from independent claims 1, 11, 13 and 16.

Further Appellant submits that the Examiner continues to allege that the fact that Hogan (paragraphs 12-13) recites “the core network and the radio access network communicate via the lu interface in the control plane” means that Hogan teaches “a method for controlling access rights in a cellular mobile radio system, comprising transferring roaming agreement information from a core network to a radio access network of said cellular mobile radio system”.

Hogan (paragraph 19) reciting “the IMSI is received in the RNC from the core network (CN) in a RANAP COMMON IS message when a radio resource control (RRC) connection is setup”, where RANAP COMMON ID message corresponds to one of the control plane messages sent on the lu interface, is not more relevant, in particular because the IMSI does not correspond to “roaming agreement information”. Roaming agreements are agreements signed between operators of public mobile networks (PLMNs). Even if the IMSI of a mobile subscriber contains information (MCC, MNC) enabling one to know the operator/PLMN for this subscriber, this is of course not sufficient to enable one to know which roaming agreements this operator signs with other operators; other information (“roaming agreement information”) is necessary for this. Paragraphs 15-19 of Hogan, which concern various techniques for handling access rights, do not

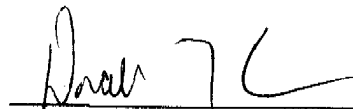
disclose or suggest anything related to a transfer of "roaming agreement information" from the core network to the radio access network.

**Conclusion**

In summary, at least based on the foregoing, Appellants submit that the Examiner has not demonstrated that each and every feature of the claimed invention, as set forth in claims 1-16, is taught and/or suggested by Hogan. Therefore, Appellants submit that claims 1-16 are patentably distinguishable over the applied art.

The USPTO is directed and authorized to charge the statutory fee (37 C.F.R. §41.37(a) and 1.17(c)) and all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: July 6, 2009

**CLAIMS APPENDIX**

CLAIMS 1-16 ON APPEAL:

1. A method for controlling access rights in a cellular mobile radio system, comprising transferring roaming agreement information from a core network to a radio access network of said cellular mobile radio system, wherein said roaming agreement information is transferred independently of messages linked to calls or user equipments.
2. The method according to claim 1, wherein the roaming agreement information transferred is common to a public land mobile network (PLMN) identified by a subset of an international mobile subscriber identity (IMSI) number.
3. The method according to claim 2, wherein said subset includes a mobile country code field (MCC) and a mobile network code (MNC) field.
4. The method according to claim 1, wherein according to said roaming agreement information access to a visited public land mobile network (VPLMN) is authorized for the whole VPLMN or limited to certain areas of said VPLMN.
5. The method according to claim 4, wherein said certain areas of said VPLMN are areas in which a home public land mobile network (HPLMN) does not provide radio coverage.

6. The method according to claim 1, wherein the roaming agreement information transferred is indicated for each location area (LA).

7. The method according to claim 1, wherein said roaming agreement information is transferred in the event of modification of said information in the core network.

8. The method according to claim 1, wherein the core network is configured beforehand with said roaming agreement information.

9. The method according to claim 8, wherein said configuration is effected by operation and maintenance means.

10. The method according to claim 1, wherein said roaming agreement information is stored in the core network in a database of a visitor location register (VLR) type.

11. A radio access network equipment of a cellular mobile radio system, the radio access network equipment comprising:

means for receiving roaming agreement information from a core network equipment,

wherein the roaming agreement information is received independently of messages linked to calls or user equipment.



12. The radio access network equipment according to claim 11, wherein the radio access network equipment is a radio network controller (RNC).

13. A core network equipment of a cellular mobile radio system, the core network equipment comprising:

means for transferring roaming agreement information to a radio access network equipment,

wherein the roaming agreement information is transferred independently of messages linked to calls or user equipment.

14. The core network equipment according to claim 13, wherein, said roaming agreement information is stored in a visitor location register (VLR), and said core network equipment takes a form of a mobile switching center (MSC) type equipment connected to a visitor location register (VLR).

15. The core network equipment according to claim 14, wherein, said roaming agreement information is stored in a visitor location register (VLR), and said core network equipment takes a form of a Serving General Packet Radio Service (GPRS) support node (SGSN) type equipment which integrates a visitor location register (VLR).

16. A mobile radio system comprising:

a plurality of mobile terminals;

a core network which contains roaming agreement information; and

a radio access network which communicates with the mobile terminals and the core network and manages mobility of the mobile terminals within the radio access network wherein the roaming agreement information is transferred independently of messages linked to calls or user equipment.

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**EVIDENCE APPENDIX:**

NONE.

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**RELATED PROCEEDINGS APPENDIX**

NONE.

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**SUBMISSION OF APPEAL BRIEF**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
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Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. The USPTO is directed and authorized to charge the statutory fee of \$540.00 and all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

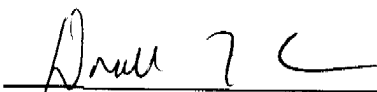
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